

Terms of Reference of HELCOM Expert Group on Monitoring of Radioactive Substances in the Baltic Sea (HELCOM MORS EG)

adopted by HOD 51-2016 as endorsed by State & Conservation 5-2016

MORS EG reports to HELCOM Working Group on the State of the Environment and Nature Conservation (WG STATE & CONSERVATION) and follows HELCOM Rules of Procedure.

1. Introduction

The 2013 HELCOM Copenhagen Ministerial Declaration acknowledges that due to radioactive fallout from the Chernobyl accident the Baltic Sea has the highest concentrations of ¹³⁷Cs of any regional sea and recognizes the risk of pollution by radioactive substances caused by nuclear accidents in the Baltic Sea catchment area or farther away. The Baltic Sea furthermore ranks third in the world with respect to ⁹⁰Sr in seawater, with only the Irish Sea and the Black Sea showing higher concentrations.

Development in the energy supply sector within both HELCOM Contracting Parties and in the Baltic Sea Region in general, shows continued use of nuclear energy. This requires enhanced cooperation between the countries of the Region on matters related to prevention of environmental impacts on the Baltic Sea ecosystem from operating as well as planned nuclear installations.

Therefore HELCOM reconfirmed at the HELCOM Copenhagen Ministerial Meeting in 2013 its task to continue monitoring of radioactive substances in accordance with HELCOM Recommendation 26/3 and making assessments of the impacts of radioactivity on the marine environment and humans.

The HELCOM 2018 Brussels Ministerial Declaration further noted that radioactivity continues to be a cause of concern, but it is expected that concentrations of radioactive substances indicative of good status could be achieved by 2020

The HELCOM Expert Group on Monitoring of Radioactive Substances in the Baltic Sea (hereinafter – HELCOM MORS EG) aims to implement monitoring of radioactive substances and making assessments of the impacts of radioactivity on the marine environment and humans within the scope of work as described below. The HELCOM MORS EG will base its work on the expertise and knowledge of the HELCOM MORS Group collected since 1986.

2. Overall objectives of the Expert Group

The overall objective of the HELCOM MORS EG is to implement the Helsinki Convention on matters related to monitoring and assessment of radioactive substances in the Baltic Sea. The work is based on relevant HELCOM Recommendations and will support the State and Conservation Working Group (HELCOM STATE & CONSERVATION).

More specifically the HELCOM MORS EG aims:

- to coordinate basic monitoring programmes on radioactive substances in the Baltic Sea carried out by the Contracting Parties in accordance with relevant HELCOM Recommendations and the valid Guidelines;
- to compile annually data on discharges of radioactivity from civil nuclear facilities to the Baltic Sea reported by the Contracting Parties;
- to compile annually data on discharges and environmental levels of radioactivity in the Baltic Sea submitted to the HELCOM databases, in accordance with relevant HELCOM Recommendations,
- to validate annually all data in the HELCOM MORS databases of environmental and discharge data and to make them available on relevant electronic media to MORS EG;
- to update as requested HELCOM Baltic Sea Environment Fact Sheets and the Core indicator report on radioactive substances in the Baltic Sea;
- to keep the Guidelines on the monitoring of radioactive substances in the Baltic Sea updated;
- to coordinate and organize intercomparison exercises on seawater, and encourage participation in other proficiency tests and intercomparison exercises to assure high quality of the monitoring data;

- to produce periodic assessments on radioactivity in the Baltic Sea. These assessments will include levels, inventories and trends for radioactivity in the Baltic Sea and the radiological impact on man and environment.
- to keep under observation the development of trends of export of radionuclides from the Baltic Sea to the North Sea and vice versa, especially the inflow of radioactivity (e.g. ^{99}Tc , ^{129}I) from Sellafield and La Hague to the Baltic Sea and the outflow of Chernobyl radioactivity from the Baltic Sea to the Skagerrak;
- to produce thematic reports as requested, e.g. on naturally occurring radionuclides in the Baltic Sea, releases of man-made radionuclides from non-nuclear activities (e.g. hospitals), simple procedures for assessing doses to man from radioactivity in the Baltic Sea;

3. Expected results

The Group will be subordinate to HELCOM State and Conservation and will provide

- annual reporting to the State and Conservation Working Group (HELCOM STATE & CONSERVATION) in order to keep the Commission and the Contracting Parties informed on:
 - collection, validation and evaluation of the environmental data and discharge data on radioactivity submitted to the HELCOM databases;
 - the risks to humans and marine life caused by direct discharges to the Baltic Sea as well as long-range transport of radioactive substances;
 - to ascertain that all aspects of quality assurance of analytical data are covered within the monitoring activities. This will be done in close co-operation with the International Atomic Energy Agency (IAEA);
- regular updates of the HELCOM Baltic Sea Environment Fact Sheets and the Core indicator report on radioactive substances.
- to maintain expertise for the Contracting Parties on routine and emergency monitoring and assessment of radioactivity in the Baltic Sea;

4. Working procedure of the HELCOM MORS EG

- 4.1 The HELCOM MORS EG will consist of experts representing
- national authorities and/or monitoring institutions that are, *i.a.*, responsible for protection of marine environment from contamination by radioactive substances within HELCOM Contracting Parties,
 - the European Commission,
 - the **International Atomic Energy Agency (IAEA)**
 - Data Consultants responsible for maintenance of HELCOM MORS databases of environmental and discharge data;
- 4.2 The Chairperson of the HELCOM MORS EG shall be elected by the participants of the Group for a two-year period. The Group can propose a chairperson in the meeting before the election year in order to prepare the person for the expected work load.
- 4.3 The Rules of Procedure applicable to the conduct of the business of the Helsinki Commission apply *mutatis mutandis* to the work of the HELCOM MORS EG (cf. para 7.7 of the Rules of Procedure of the Helsinki Commission).
- 4.4 The work of HELCOM MORS EG will be supervised and guided by HELCOM STATE & CONSERVATION.
- 4.5 The Contracting Parties will be responsible to carry out the monitoring programme according to relevant HELCOM Recommendations and to cover the expenses for the participation of members in the work of the HELCOM MORS EG.
- 4.6 The HELCOM Secretariat will provide administrative support to the HELCOM MORS EG.
- 4.7 The Secretariat may, in consultation with the Chairperson, invite additional experts on a case by case basis to the HELCOM MORS EG; to give presentations or to participate in its work;
- 4.8 Meetings will be held at appropriate intervals and at least once a year in accordance with the Working Programme to be approved by HELCOM State & Conservation/HELCOM HOD.

- 4.9 The HELCOM MORS EG will regularly report to the HELCOM State & Conservation as concerning monitoring and trends of the radioactive substances at sea as well as regarding inputs of radioactive substances to the Baltic from land-based sources.
- 4.10 The HELCOM MORS EG will be represented at State and Conservation Working Group meetings, when feasible, by a national representative from the host country.
- 4.11 The HELCOM MORS EG will exchange information, and also inform the State and Conservation Working Group on unexpected results and incidents concerning radioactivity.